

Colossal or clever?

The choice ambitious ports face...

Keith McSwain, Business Manager, Americas for Jade Software Corporation discusses some of the current trends in the shipping industry and how ports can best compete.

American author Mark Twain once said: “To stand still is to fall behind.” Even today his wise words ring true and are pertinent to ports around the globe. In an ever-changing arena, ports and terminals must ask themselves key strategic questions in order to remain relevant. Chiefly – is bigger better? In an effort to stay competitive should terminals cater to mega container ships or offer more diverse services, like managing mixed cargo?

How can a port get ahead in today's market?

When a port is contemplating how to gain a sustainable competitive advantage, they need to first consider current trends in the industry. The race to build larger vessels in order to carry greater volumes of container cargo and hence achieve better economies of scale is one such trend. Another is the reemergence of non-containerised, break bulk cargo in worldwide shipping logistics, which makes up more than a third of general maritime cargo transport. In light of these trends, a port has two evident alternatives available when determining where to strategically position itself in the market to best compete. To significantly invest in infrastructure to cope with larger container vessels or to broaden the types of cargo ships that they cater to. Tackling the task of accommodating larger ships entails investing in costly alterations and infrastructure including deepening approach channels, widening turning basins, and purchasing larger cranes. Not all ports will have the resources to contend with these mega-vessel visits, the challenge then is to work smarter and offer the shipping companies greater choices. One way a port can do this is by demonstrating the ability to handle mixed cargo and not just containers. As non-containerised commodities



like steel, pulp, paper, and fresh produce increase, a number of ports across the world are realising the potential of optimising terminal operations to handle mixed cargo and adjusting their policies and processes accordingly. They are attracting shipping lines by not only accommodating containers but also bulk, break bulk, RORO (roll-on/roll-off) and project cargo. Either way, modern shipping ports can no longer see themselves in isolation. They are critical components within global transport networks and product supply chains. As the importance of shipping ports grows, so does the competition between regional ports. Do nothing, and they will be left behind.

What are the challenges of handling mixed cargo?

Traditionally, break bulk cargo or mixed cargo was the most common means of transporting cargo. However, the advent of containerised cargo in the 1960s saw a decline as more and

more ports found containers to be easier to handle and enabled them to turn the ships around faster. Port authorities across the world have been focused on developing infrastructure and systems with standard size containers as the central focus. However recently, the decline in the share of mixed cargo operations has plateaued as shippers realise that containers are not optimal for all cargo types. Therefore challenges have arisen when trying to track break bulk cargo with systems and machines that are built to scan and track containers. The container focus of most yard configurations results in less than optimal space utilisation and ship turnaround times. Similarly, the container-biased Terminal Operating Systems (TOS) products lack the flexibility to manage non-standard size cargo.

What are the opportunities of handling mixed cargo?

There are a number of advantages for all stakeholders involved in a port to invest in

capabilities for the efficient handling of mixed cargo. Advantages of scale exist from a product point of view – handling the same product both conventionally and containerised can generate operational efficiencies. In addition, a terminal or a shipping line can offer its customers a fuller range of services.



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To be competitive, it is increasingly important for the operators of growing ports to demonstrate the ability to combine break bulk and containers. For a port to be competitive in terms of quality, throughput and cost, it all boils down to efficiency of operations and the speed with which ships can be turned around carrying the most optimal loads. While the challenge of managing containerised and break bulk cargo within the same operational framework may seem daunting at the start, it can be tackled, and indeed can be turned into a lucrative operation, with a sophisticated, state-of-the art TOS that is configured to the specifications of the terminal. In the current tough economic climate where capital is constrained for ports, relatively little spending on a sophisticated TOS goes a very long way. A TOS that allows the port to raise efficiency and capital utilisation levels, and extract every bit of revenue potential with existing physical infrastructure is a wise investment. Implementing a TOS configured to the needs of the port has the potential to vastly improve ship turnaround times as well. While a port can merely ‘make do’ with a stock standard TOS developed with a one-size-fits all approach that focuses only on container cargo management, an ambitious, growing port will excel under a system that is highly configurable and especially suited to handling containers and mixed cargo.

How can I claim a share of the mixed cargo market?

Managing mixed cargo can be a challenge, or an opportunity to claim market space. An ambitious, growing port needs a capable systems partner who understands the complexities involved in moving containers as well as vehicles, steel, forestry products and other assorted break bulk/bulk, and can help simplify the entire process.

If you are in a team that is leading an ambitious and growing port, the following are some questions to consider when evaluating your systems:

- *Is the existing port and terminal infrastructure tuned to maximise efficiencies while handling both containerised and break bulk cargo?*
- *Is your port using the most advanced, state-of-the art TOS designed to manage multi-cargo operations? Can it treat each item of general cargo as a separate entity?*
- *Does the TOS operate in a silo, or does it ‘talk’ to all the applications within the port ecosystem maintaining synchronisation with all systems?*
- *If you are considering upgrading to a new TOS, how quickly will the port be able to recover the return on investment accruing through resultant efficiencies, reduced costs and increased revenues?*


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For ports focused on improving efficiencies, competing aggressively for market share and taking the fight to the mega-ports, the answer lies in a terminal operating system that offers flexibility in handling mixed cargo and a high degree of reliability to manage overall operations. Jade’s terminal operating



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system, Master Terminal solves the complex problem of managing a variety of mixed cargo within one system, providing the agility you need to compete. Unlike most solutions available today, Master Terminal has been designed to cater for all cargo types, making it the TOS of choice for mixed cargo terminals. It is a powerful, highly configurable TOS accessible via Windows thin clients, the Internet, and mobile devices. It provides a single integrated, real-time view of all operations and data, allowing you to make decisions smarter and faster, resulting in improved productivity and operational efficiency. It is an extremely stable solution capable of forming the core of your port’s information systems, yet flexible enough to meet your port’s specific challenges. Multiple sites, terminals and sub-terminals can all be managed within a single database. Backed by expert support and implemented with minimum disruption to day-to-day business, Master Terminal will give you the cost efficiencies and visibility to your business to allow you to make decisions today and in the future. Agile ports use Master Terminal to compete against the biggest and best in the world’s toughest industry and come out on top. 

Jade Software recently presented a paper at the Port & Terminal Technology USA Conference & Exhibition. For details on how to submit an abstract for the 2016 event to be held in Charleston please contact claire@mcimedia.com